IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (Previously Presented). A method of peak-to-average reduction of an oversampled signal for a digital communication system, comprising:

detecting a first peak portion of the oversampled signal that exceeds a predetermined threshold;

determining a width of said first peak portion;

applying a first shaping response to said first peak portion, said first shaping response having a variable width;

varying said first shaping response width responsive to said first peak portion width;

determining a second peak portion of said input signal which exceeds said predetermined threshold;

determining a width of said second peak portion; and

applying a second shaping response to said second peak portion, wherein said second shaping response having a variable width responsive to said second peak portion.

2 (Original). The method of Claim 1, wherein said first shaping response further having a variable scale factor determined by a difference of said predetermined threshold and a peak magnitude of said first peak portion.

3 (Previously Presented). The method of Claim 1, wherein said determining the width of said first peak portion includes estimating a number of samples which exceed said predetermined threshold.

4 (Previously Presented). The method of Claim 3, wherein said variable width of said first shaping response is indicative of said estimated number of samples which exceed said predetermined threshold.

5 – 6 (Canceled).

7 (Previously Presented). The method of Claim 1, wherein said determining the width of said second peak portion includes estimating a number of samples which exceed said predetermined threshold.

8 (Original). The method of Claim 7, wherein said second shaping response variable width is indicative of said estimated number of samples which exceed said predetermined threshold.

9 (Original). The method of Claim 1 further including applying a first echo modifier subsequent to application of said first shaping response, said first echo modifier having a variable scale.

10 (Previously Presented). The method of Claim 9 further including varying said first echo modifier variable scale in response to said determined width of said first peak portion.

11 (Previously Presented). An apparatus for peak-to-average reduction of an oversampled signal in a digital communication system, comprising:

a buffer having an input adapted to receive said oversampled signal and operable to delay said oversampled signal by a predetermined number of samples;

a detector coupled to said buffer and operable to determine a first peak portion for said oversampled signal wherein at least a portion of said first peak portion exceeds a predetermined threshold, said detector further operable to estimate a width of said first peak portion and wherein said detector is further operable to estimate a width of said second peak portion which exceeds said predetermined threshold;

a first modifying unit having an input adapted to receive an indication from said detector of said first peak portion width and operable to apply a variable width first shaping response to said first peak portion width subsequent to said oversampled signal output from said buffer; and

a second modifying unit having an input adapted to receive an indication from said detector of said second peak portion width and operable to apply a variable width second shaping response to said second peak portion width.

12 (Previously Presented). The apparatus of Claim 11, wherein application of said variable width first shaping response to said first peak portion width results in a first modified peak portion below said predetermined threshold.

13 (Original). The apparatus of Claim 11, wherein said variable width first shaping response is indicative of said estimated width of said first peak portion.

14 (Previously Presented). The apparatus of Claim 11, wherein said variable width first shaping response further having a variable scale factor determined by a difference of said predetermined threshold and a peak magnitude of said first peak portion.

15 (Original). The apparatus of Claim 11, wherein said detector further operable to estimate a number of samples of said first peak portion which exceed said predetermined threshold.

16 (Previously Presented). The apparatus of Claim 11, wherein said detector further operable to determine a second peak portion of said oversampled signal wherein at least a portion of said second peak portion exceeds said predetermined threshold.

17 – 18 (Canceled).

19 (Previously Presented). The apparatus of Claim 11, wherein said variable width second shaping response is indicative of said estimated width of said second peak portion.

20 (Currently Amended). A system for peak-to-average reduction of an oversampled signal for a transceiver comprising a transmit portion and a receive portion coupled via a hybrid circuit, said system comprising:

a buffer having an input adapted to receive said oversampled signal on said transmit portion and operable to delay said oversampled signal by a predetermine number of samples;

a transmit peak detector coupled to said buffer and operable to determine a first peak portion for said oversampled signal, wherein at least a portion of said first peak portion exceeds a predetermined threshold;

a modifying unit having an input adapted to receive an indication from said transmit peak detector of said first peak portion and operable to apply a first shape modifier to said first peak portion subsequent to said oversampled signal output from said buffer; and

a shape canceller coupled to said receiver portion and having an input adapted to receive an indication from said transmit peak detector and operable to apply a variable scale cancellation signal subsequent to application of said first shape modifier

wherein said modifying unit is further operable to vary a width of said first shape modifier in relation to said estimated width of said first peak portion and said

shape canceller is further operable to vary said scale of said cancellation signal in relation to said estimated width of said first peak portion.

21 (Previously Presented). The system of Claim 20, wherein said transmit peak detector is further operable to estimate a width of said first peak portion.

22 (Canceled).

23 (Previously Presented). A method of peak-to-average reduction of an oversampled signal for a digital communication system, comprising:

detecting a first peak portion of the oversampled signal that exceeds a predetermined threshold;

determining a width of said first peak portion;

applying a first shaping response to said first peak portion, said first shaping response having a variable width;

varying said first shaping response width responsive to said first peak portion width; and

applying a first echo modifier subsequent to application of said first shaping response, said first echo modifier having a variable scale.

24 (Previously Presented). The method of Claim 23 further including varying said first echo modifier variable scale in response to said determined width of said first peak portion.

25 (Currently Amended). A method of processing a signal comprising:

detecting a plurality of peak portions of the signal that exceed a predetermined threshold;

determining a width of each one of the plurality of peak portions of the signal;

applying a corresponding shaping response to each one of the plurality of peak portions of the signal from a plurality of shaping responses, the plurality of shaping responses having a variable width;

varying the variable widths of the plurality of shaping responses responsive to ~~widths of~~ corresponding width of the plurality of peak portions of the signal.

26 (Currently Amended). The method of Claim 25 further comprising:

applying a first echo modifier subsequent to application of said corresponding shaping response to each one of the plurality of peak portions of the signal, said first echo modifier having a variable scale; and

varying said first echo modifier variable scale in response to the corresponding width of each one of the plurality of peak portions of the signal.